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| 10/538,282 | 06/10/2005 | Stephen M Pitchers | GB02 0227 US | 1864 |

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| EXAMINER |
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DAO, MINH D

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| ART UNIT | PAPER NUMBER |
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2618

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01/02/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/538,282 | Applicant(s) PITCHERS, STEPHEN M | |
| | Examiner MINH D. DAO | Art Unit 2618 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12, 13, 21 and 22 is/are rejected.
- 7) ☒ Claim(s) 1, 14-20, 23, 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. The Applicant's remarks regarding the Restriction Requirement dated 10/13/2008 of claims 1-24 are persuasive. Therefore, the Restriction Requirement dated 09/11/2008 has been withdrawn, accordingly all claims (1-24) are now considered on the merits.

Response to Arguments

Applicant's arguments filed 11/27/07, regarding claims 1, 6, and 7, have been fully considered but they are not persuasive. Applicant argues (page 14) that Liang does not teach "a blocking signal to block the second wireless transceiver in response to an enabled communication involving the first wireless transceiver". Examiner respectfully disagrees. Liang teaches that "Once the CU 510 (Mediator) has scheduled a reservation request, it returns a reservation to the requesting MAC (Controller) that requests for transmit. If the requesting MAC does not receive a reservation for its reservation request, the corresponding wireless network is not able to transmit (see col. 9, lines 5-30). In this case, the returning of the reservation from the CU 510 back to the requesting MAC to inform it whether it's allowed to transmit or not reads on the "providing the controller with a blocking signal to block the second wireless transceiver module" as recited in claims 1, 6 and 7. Claims 1, 6 and 7 are therefore remained rejected for the reason set forth above.

Regarding claims 12, and 21, Applicant argues that Liang does not teach "the mediator is coupled to a communication channel between the first wireless transceiver module

and a physical layer". Examiner respectfully disagrees. In fig. 5 of Liang, it is clear that the Mediator (CU 510) is connected to the 802.11 PHY 520 by way of the controller (515). Since the claim fails to detail how the Mediator is coupled to the physical layer, the teaching of " Mediator (CU 510) is connected to the 802.11 PHY 520 by way of the controller (515)" as indicated in fig. 5 of Liang arrives at the claimed invention.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-10, 12, 13, 21, 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Liang (US 7,099,671).

Regarding claim 1, Liang teaches an electronic device, comprising: a first wireless transceiver module using a first communication protocol (see fig. 3, item 330); a second wireless transceiver module using a second communication protocol (see fig. 3, item 320), the second wireless transceiver module comprising a controller for avoiding an interference with an external signal on a frequency of the second communication protocol (see fig. 5; col. 8, line 20 to col. 9, line 47. In this case, the MAC 515 of Liang reads on the Controller of the present invention); and a mediator coupled between the

first wireless transceiver module and the second wireless transceiver module, the mediator being arranged to provide the controller with a blocking signal in response to an enabled communication involving the first wireless transceiver module (see fig. 5; col. 8, line 33 to col. 9, line 47). In this case, the CU 510 of Liang reads on the Mediator of the present invention). Also see newly stated Response-to-Argument above for the teaching of Liang regarding the limitation “to provide the controller with a blocking signal in response to an enabled communication involving the first wireless transceiver module”.

Regarding claim 2, Liang teaches an electronic device as claimed in claim 1, wherein the controller implements at least a part of a carrier sense multiple access collision avoidance principle (see col. 8, line 33 to col. 9, line 47. In this case, the coordination and determination of when to transmit arrangement between the two collocated systems of Liang to avoid collision or interference from one to the other collocated system reads on the carrier sense multiple access collision avoidance principle of the claim.).

Regarding claim 3, Liang teaches an electronic device as claimed in claim 1, wherein the first wireless transceiver module and the second wireless transceiver module share at least a part of a physical layer (see fig. 5, items 520,525,535; col. 8, lines 33-39 (the digital device that can house both the BT and 802.11 wireless NICs reads on the “first wireless transceiver module and the second wireless transceiver module share at least a part of a physical layer” of the claim.).

Regarding claim 4, Liang teaches an electronic device as claimed in claim 1, wherein the mediator is arranged to provide the blocking signal during a time interval matching the duration of the enabled communication (see col. 9, lines 5-11. Also see newly stated Response-to-Argument above for the teaching of Liang regarding the limitation “to provide the controller with a blocking signal in response to an enabled communication involving the first wireless transceiver module”).

Regarding claim 5, Liang teaches an electronic device as claimed in claim 1, wherein the first wireless transceiver module (320, fig. 3) comprises a further controller (530, fig. 5) for avoiding an interference with a further external signal on a frequency of the first communication protocol; the mediator (CU 510) being further arranged to provide the further controller with a further blocking signal in response to a further enabled communication involving the second wireless transceiver module (see fig. 5, item 530 and 535. See also newly stated Response-to-Argument above for the teaching of Liang regarding the limitation “to provide the controller with a blocking signal in response to an enabled communication involving the first wireless transceiver module”).

Regarding claim 6, the claim is the method claim of claim 1 and claim 6 includes similar limitations as that of claim 1, and therefore claim 6 is interpreted and rejected for the same reason set forth in the rejection of claim 1.

Regarding claim 7, the claim includes the limitations as that of claim 1, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 1. In addition, Liang also teaches a wired network (see fig. 3, Digital Device 310 coupled to items 320 (802.11) and 330 (Bluetooth); also col. 8, line 33 to col. 9, line 47).

Regarding claim 8, Liang teaches a communication system as claimed in claim 7, wherein the mediator is coupled to the controller via the wired network (see col. 8, lines 33-43).

Regarding claim 9, the claim includes the limitations as that of claim 5, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 5.

Regarding claims 10, 13, 22, the claims include the limitations as that of claim 3, and therefore is interpreted and rejected for the same reason set forth in the rejection of claim 3.

Regarding claims 12, and 21, Liang teaches that the mediator is coupled to a communication channel between the first wireless transceiver module and a physical layer (520) (see fig. 5). In fig. 5 of Liang, it is clear that the Mediator (CU 510) is connected to the 802.11 PHY 520 by way of the controller (515). Since the claim fails to detail how the Mediator is coupled to the physical layer, the teaching of " Mediator (CU

510) is connected to the 802.11 PHY 520 by way of the controller (515)” as indicated in fig. 5 of Liang arrives at the claimed invention.

Allowable Subject Matter

4. Claims 11, 14-20, 23, 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claims 11, 16, and 20, Liang, as indicated above, teaches the limitations of claims 1, 6, and 7 respectively, but fails to disclose that “wherein the mediator is configured to observe commands from the first wireless transceiver module to a physical layer” as recited in the claims.

Regarding claims 14, 18, and 23, Liang, as indicated above, teaches the limitations of claims 1, 6, and 7 respectively, but fails to disclose that “wherein the blocking signal is fed into a received signal strength indication channel of the controller” as recited in the claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MINH D. DAO whose telephone number is (571)272-7851. The examiner can normally be reached on 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MATTHEW ANDERSON can be reached on 571-272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MINH DAO
/MINH D DAO/
Examiner, Art Unit 2618